

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-283824

(43)Date of publication of application : 13.10.2000

(51)Int.CI.  
 G01F 23/28  
 G01B 11/00  
 G06K 7/00  
 G06K 7/10

(21)Application number : 11-090571 (71)Applicant : SUZUKI MOTOR CORP

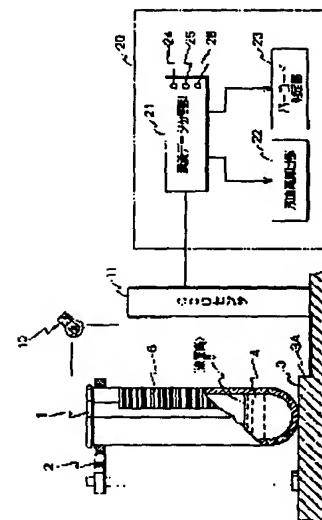
(22)Date of filing : 31.03.1999 (72)Inventor : FURUTA TOSHIYUKI

## (54) CONTAINER INFORMATION MEASURING APPARATUS

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To acquire information about an object to be inspected in a short time at a low cost.

**SOLUTION:** The apparatus comprises a table 3 for holding a container 1 such as test tubes, a supporting means 2 disposed near the table 3 for supporting the container 1, a light source 10 for irradiating an illumination light on the side face of the container 1, a CCD sensor 11 having pixels for imaging the side face of the container in a direction approximately perpendicular to the surface of a liq. 4 in the container 1 and a signal processing means 20 for processing density data outputted from the CCD sensor 11. The signal processing means 20 comprises a density data divider 21 for extracting a bar code part signal with a rapid change of the density from the density data and also a liq. part signal having a gradation value corresponding to the density of the liq. in the container 1 from the density data, a bar code deciding part 23 for interpreting an identification code described by the bar code, based on the bar code part signal extracted by the data divider 21, and a calculator 22 for calculating the liq. level height 5 in the container 1 according to the pixel position at the top end of the container 1 in the liq. part signal extracted by the divider 21.



### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]